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## Maryland Public Schools

# Preparing World-Class Students

**State of Education 2011**

March 2011

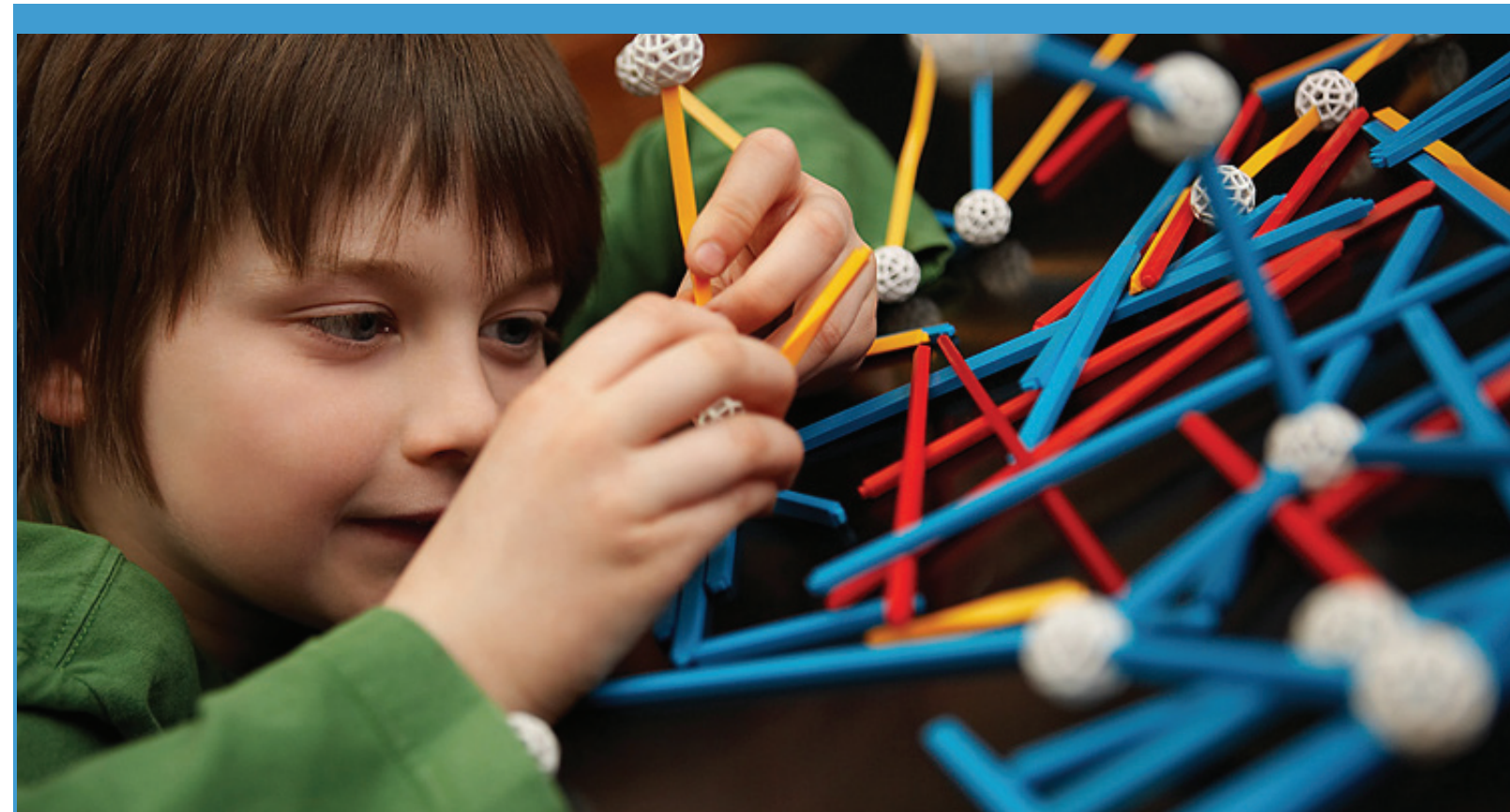
*James H. DeGraffenreidt, Jr., President , Maryland State Board of Education*

*Nancy S. Grasmick, State Superintendent of Schools*

*Martin O'Malley, Governor*

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State of Education 2011

MARYLAND STATE DEPARTMENT OF EDUCATION

# Preparing World-Class Students

Maryland schools rank #1 for an unprecedented third year in a row.



“Maryland has both overall high achievement levels and is a policy-centric state that believes that State policies matter for teaching and learning.”

—Amy Hightower,  
Director of Editorial Projects  
in The Education Research  
Center, *Education Week*,  
January 11, 2011

## Dear Friends of Public Education:


For an unprecedented third year in a row, Maryland public schools once again picked up top honors for the work going on in our classrooms! We are thrilled that Maryland’s education system has again been **ranked #1 in the nation** by *Education Week*, the nation’s leading education publication. In addition, the College Board followed that up by ranking the State first in the nation for its rigorous Advanced Placement program also for a third consecutive year for student performance.

Further, our schools continuously catch the eye of *Newsweek* magazine for their remarkable achievements. For the second year in a row **Maryland ranked #1** on *Newsweek’s* America’s Top Public High Schools List for the highest percentage of college-level courses being offered by high schools and taken by students.

In the fall, we were elated when Maryland, along with 11 other states and the District of Columbia, won a federal Race to the Top (RTTT) four-year grant. Our focus continues to be on our education reform efforts for Maryland’s public schools as we implement new programs and initiatives made possible through the \$250 million RTTT award. Through the grant, we will strengthen instruction by improving teacher effectiveness, bolstering assessments and data collection, and improving chronically underperforming schools. We are determined to ensure that our students are prepared for college, career, and life. We are preparing world-class students!

With all of our achievements and accolades, we have no intention of resting on our laurels, but rather pledge to further strengthen our schools. In preparing world-class students, we are aggressively working toward initiating Maryland’s education agenda. As part of that, Maryland has signed on to the Common Core State Standards Initiative—a state-led effort to develop common English and mathematics standards for the nation. Over the next three years, the Maryland Common Core State Curriculum will be developed and will be aligned with the Common Core State Standards.

This publication summarizes some of the many good things taking place in Maryland classrooms and the work being done by our State’s educators. It also looks at the future for Maryland schools. We greatly appreciate your continued support as we work on behalf of all of our students.

Sincerely,  
  
Nancy S. Grasmick  
State Superintendent of Schools

“Maryland is actually an example of a state we use to say has ‘what it takes’ to come out at the top of the nation...Importantly, it [Maryland] continues to improve over time, which is a key ingredient. What Maryland also does is it matches high performance with a really strong and durable state leadership policy.”

—Christopher Swanson, Vice President for Editorial Projects, *Education Week*, January 12, 2011

## More Recognition for Maryland’s Education System

- Maryland’s Class of 2010 graduating seniors were offered nearly \$800 million in scholarship funding to continue their pursuit of knowledge at the college of their choice. About 1 in 3 students received scholarship offers. The scholarships included a record number of 310 National Merit Finalists and 400 scholarship offers from Ivy League institutions.
- Northrop Grumman Corporation presented the Maryland State Department of Education (MSDE) with a two-year \$250,000 grant designed to bolster STEM programs in the State. The grant will be used to build a pipeline of STEM-prepared Maryland graduates.
- Maryland students were honored for their fundraising efforts. The “Maryland Kids Care Campaign: Operation Haiti,” collected more than \$500,000 to help that nation ravaged by a powerful earthquake. The “Annual Harvest for the Hungry Campaign” gathered 429,792 pounds of food and \$104,835 in donations for the Maryland Food Bank and its affiliates.
- MSDE and Special Olympics Maryland formed a partnership to develop a series of online courses for physical education teachers on adapted physical education content and strategies for servicing students with disabilities in physical education.
- Maryland AskUsNow, the program that links librarians and researchers, has answered 300,000 questions since its inception in 2003.
- According to a Food Research and Action Center’s report, Maryland had the second highest increase in the nation in summer nutrition program participation from 2008 to 2009.
- MSDE has awarded more than \$6.4 million in federal 21<sup>st</sup> Century Community Learning Center (21<sup>st</sup> CCLC) grant funding to 19 programs in eight Maryland jurisdictions to provide after-school programs to children who attend high-poverty schools or those schools identified for improvement.
- The Maryland Association for Environmental and Outdoor Education (MAEOE) marked another record-breaking year for the number of Maryland Green Schools named in the program’s history, recognizing 77 new Maryland Green Schools, five new green environmental education centers, and 19 re-certifications. With the new schools, there are now 348 Maryland schools with Green School status—16 percent of all Maryland schools are Certified Maryland Green Schools.
- More than 4.2 million Maryland students engaged in 14,534 service-learning projects during the 2009-2010 school year. Maryland is the only state with a service-learning requirement for high school graduates.
- The graduating Class of 2010 amassed more than 4 million hours of service-learning activities, which is a conservative estimate by the graduating class of 2010 (59,000 students x 75 hours per student = 4,425,000).
- The Division of Rehabilitation Services (DORS) helped 1,075 people move from public benefits into employment. These new employees added \$35.2 million to Maryland’s economy.







**National Board Certified Teachers**

Maryland once again ranks 7<sup>th</sup> in the nation for the number of National Board Certified Teachers (NBCT). In the past year, 302 teachers earned their National Board Certification, bringing the total number in Maryland to 1,976. National Board Certification is one way of assuring that Maryland students have access to the education they deserve. The Maryland State Department of Education also offers nontraditional teacher certification programs such as Troops to Teachers and the Resident Teacher program offering the opportunity to bring talented and deeply committed individuals into the teaching profession and into Maryland schools.

**BRAC Ready/Military Families**

While Maryland is strongly committed to raising its education standards, there is also an immediate and more compelling reason to strengthen its STEM instruction—BRAC (Base Realignment and Closure). MSDE created a BRAC website that provides families with a wide array of information about Maryland’s local school systems in an effort to better assist them as they make the transition to Maryland.

On the webpage there are links to Maryland’s 24 local school systems; security clearance information; and publications and materials that are topic specific or that provide a snapshot of Maryland’s education excellence. In addition, there is information related to STEM education; the Gifted and Talented program; Minority Achievement; Environmental programs; Autism; Child Care; Career Technology Education; Teacher Certification and transfer; and the latest in BRAC news. Over the next few years, BRAC will bring even more science, IT, and engineering jobs to the State—that’s tens-of-thousands of jobs.

Maryland, along with 35 other states, is a member of the *Interstate Compact on Educational Opportunity for Military Children*. The *Interstate Compact* is designed to ease the transition for students and to ensure that there are no barriers to educational success imposed on children of military families because of frequent moves and deployment of their parents. Information on BRAC and the *Interstate Compact* can be found on the MSDE website, [www.MarylandPublicSchools.org/BRAC](http://www.MarylandPublicSchools.org/BRAC).



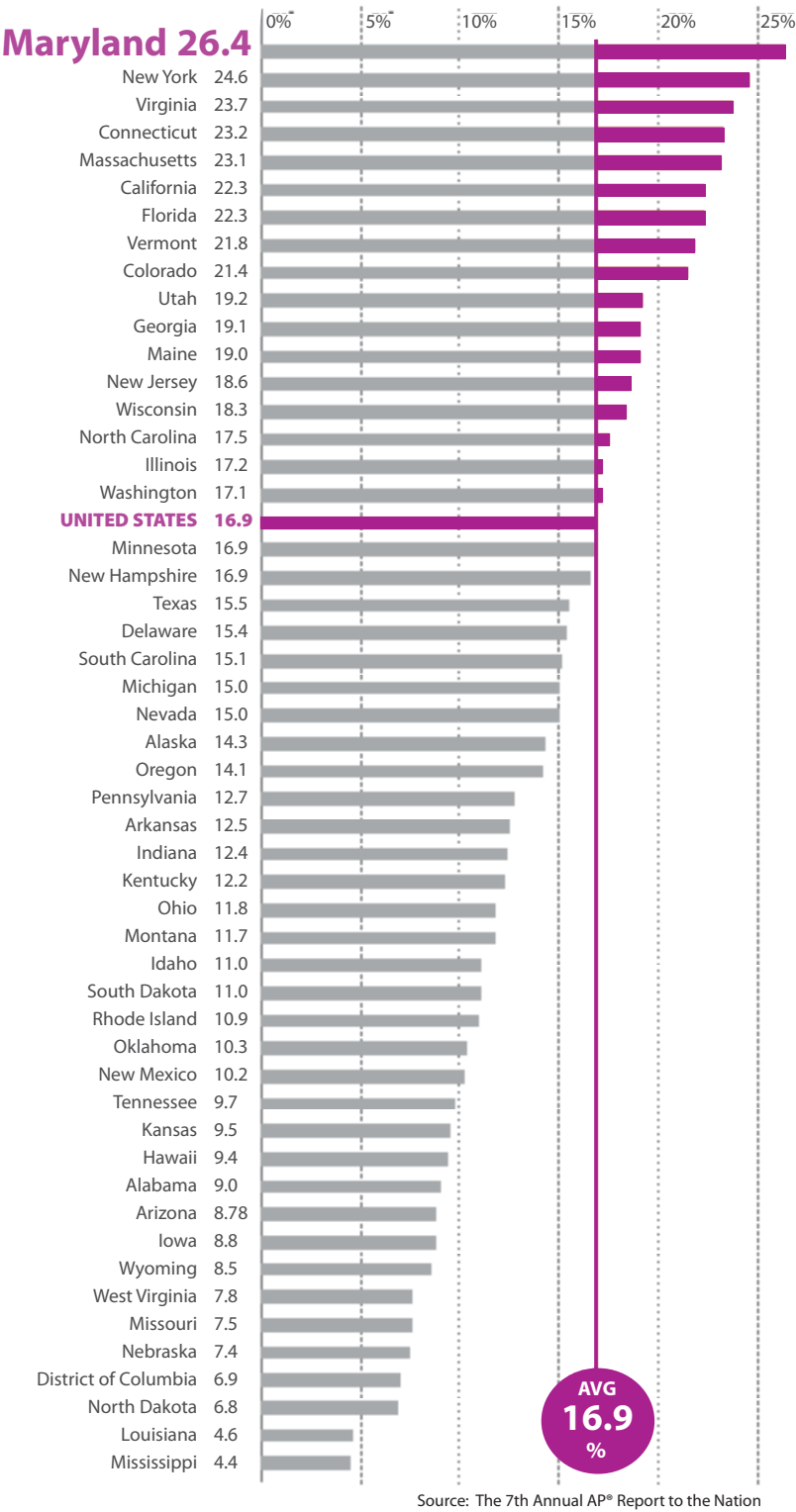
**Yet Another Remarkable Year for Maryland’s Education System**

*Education Week* and the *College Board* rank Maryland #1 in the nation for a third straight year!

It certainly was a remarkable year for Maryland’s education system. First, the nation’s leading education newspaper, *Education Week*, placed Maryland at the top of the list again, for an unprecedented third straight year, with the nation’s only B+ average in its 2011 *Quality Counts Report*. The ranking is based on State education policies and student performance that reflect nearly two decades of work on a preK-12 curriculum; state accountability and standards; teacher effectiveness; and work on school readiness, high school reform, and preparation for college and the workplace. The new report finds that no other state has a more consistent record of excellence than Maryland.

More good news came when the *College Board* ranked Maryland #1 in the nation also for a third year in a row in the percentage of seniors scoring 3 or higher on at least one AP exam. A score of 3 or higher on the 5-point scale is considered mastery of college-level work. Maryland has also dramatically increased AP participation among minority students.

Nearly 10 percent (9.9 percent) of students receiving a grade of 3 or better in Maryland were African American—that’s the fifth-highest percentage among states in the nation. Hispanic students also showed increases in participation and success in the program as 7.7 percent of the seniors who scored 3 or higher on the AP exam were Hispanic. Maryland leads the nation with the largest percentage of all seniors taking AP exams in mathematics and science disciplines (16.9 percent and 16.6 percent of the graduated senior class respectively).



Source: The 7th Annual AP® Report to the Nation

“Under Dr. Grasmick’s leadership, Maryland leads the nation with the highest percentage of public school seniors succeeding in AP for the third straight year in a row. Maryland students are rising to the challenge set by educators across the state and, as a result, more students graduate high school armed with the tools to succeed in college and beyond.”

—College Board President Gaston Caperton





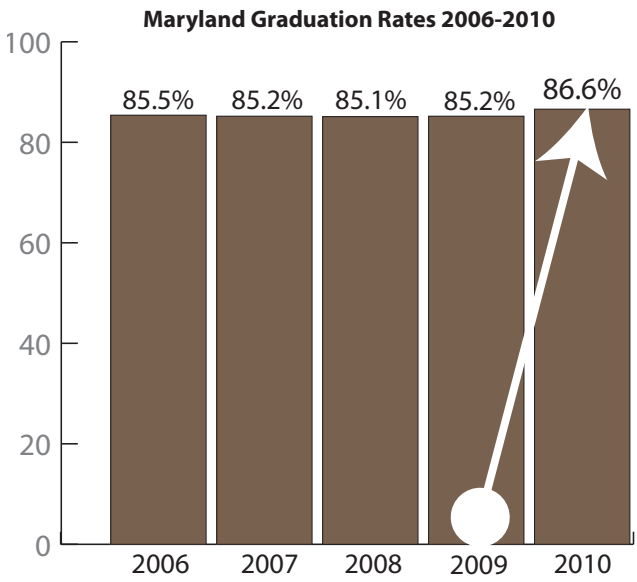
*Newsweek* magazine also ranked Maryland #1 in the nation for the second year in a row on its **America’s Top Public High Schools List** for the highest percentage of high schools offering—and students taking—college-level courses. More than half (53 percent) of the State’s high schools made the list—the highest percentage in the nation.

**High School Assessments**

The High School Assessments (HSAs) were developed to ensure that all students have the skills to be college and career ready. The 2009-2010 senior class was the second one for whom passing the HSAs in algebra/data analysis, biology, English 2, and government was a graduation requirement. MSDE officials discovered that the strengthened graduation requirement on its own was not a significant roadblock to a diploma, and that held true once again for the class of 2010. Only 33 students statewide failed to graduate solely because of the HSAs. Only 8 percent (5,012) of the students met the requirement through the alternative Bridge Plan for Academic Validation. The Bridge Plan is the project-based alternative to the HSA exams. ([www.HSAexam.org](http://www.HSAexam.org))

**Graduation Rates**

The 2010 graduation rate improved slightly from 85.2 percent in 2009 to 86.6 percent in 2010. Graduation rates improved for all racial subgroups. Among students receiving special services, only the graduation rate for English Language Learners (ELLs) registered a drop. The graduation rate for ELLs fell from 82.26 percent in 2009 to 78.21 percent in 2010.



“Maryland’s schools rank number one in the nation because of our long-standing commitment to improved education, and these results show that our students continue to respond,” said Governor Martin O’Malley. “These results speak to the hard work of educators, administrators, and parents who have kept our students on the right track.”

“Maryland’s education reforms have moved our students forward, and our school system is the envy of the nation,” said Nancy S. Grasmick, State Superintendent of Schools. “We must continue that momentum and give all students the education they deserve. With the help of these important [Race to the Top] funds, Maryland intends to bolster our data systems, improve instruction, and attract and maintain a stronger educational workforce.”



**STEM Education—Science, Technology, Engineering, and Mathematics**

A STEM revolution is under way in Maryland. It is clear that Maryland’s economy is and will be driven by innovation. For the innovation economy to thrive, it must be supported by an educated workforce with deep knowledge and strong skills in the disciplines grounded in STEM and with the ability to create, design, and think critically to solve complex problems. Through a more strategic use of existing local, State, and federal funds, and with support from Race to the Top (RTTT) funding, Maryland will improve coordination of existing STEM assets and address the shortages of well-prepared students and workers. Maryland’s RTTT STEM initiatives are designed to:

- Develop and align a rigorous P–12 STEM curriculum with college requirements and workplace expectations in order to prepare all students for postsecondary success.
- Triple the number of teachers in STEM shortage areas who are prepared in Maryland programs by developing elementary and high school STEM certifications and providing compensation incentives for teachers in STEM shortage areas.
- Ensure that P–20 mathematics and science teachers have the knowledge and skills to help all students successfully complete the college and career ready curriculum through Educator Effectiveness Academies, online professional development, and an expanded MSDE toolkit that includes STEM lesson ideas, resources, and links to common core and state curricula.
- Increase the number of STEM college graduates by developing STEM interdisciplinary curricula and lessons that will engage and motivate preK-12 students. Access to online STEM courses and virtual learning experiences for students will be expanded.
- Develop a new Career and Technology Education program in Construction Management and Design and increase the number of students in low-performing schools engaged in Project Lead the Way and the Gateway to Technology program.
- Create Maryland’s STEM Innovation Network designed to make STEM resources available to all. This STEMnet hub will provide information concerning STEM internships, co-ops, lab experiences, or competitions for all interested high school and college students to jump-start their successful transition to the workplace. It will also provide support for STEM educators by developing an electronic database of STEM practitioners willing to support classroom instruction and provide career counseling to students.

With political will, the road map of the Governor’s P-20 Task Force and Race to the Top funds, Maryland is poised to meet and exceed the STEM expectations of the 21<sup>st</sup> century. Specific details of these RTTT STEM initiatives can be accessed through the MSDE website, [www.MarylandPublicSchools.org](http://www.MarylandPublicSchools.org).

**Educator Effectiveness Academies**

As part of its third wave of reform, MSDE will be conducting a number of regional Educator Effectiveness Academies beginning this summer (2011) and continuing through 2014. These professional development programs are aimed at building educators’ knowledge of new reform measures; knowledge that they will bring back to all of Maryland’s schools. The 2011 Academies are specifically targeted at expanding educators’ understanding about the new state curriculum, the Maryland Common Core State Curriculum, and how STEM education aligns with these new standards. More than 6,000 educators, representing every school in the state of Maryland, are expected to participate in the 2011 summer Academies. Each school will select a team of four representatives to participate, comprised of the school’s principal and one teacher from each of the following subject areas: English/language arts; mathematics; and science, technology, engineering, and mathematics (STEM) content.



“Maryland’s public education system ranks number one in the nation because of our commitment to continuous improvement, and these results show that our schools are still on the move,” said Governor Martin O’Malley. “The work of our educators and students is to be commended. They have come a long way in a very short time.”

## Maryland’s Vision for Education Reform

### Race to the Top (RTTT)

Maryland was awarded one of the federal government’s coveted Race to the Top (RTTT) education grants, worth \$250 million over four years. The unprecedented \$4.3 billion federal program is aimed at boosting student achievement, reducing gaps in achievement among student subgroups, turning around struggling schools, and improving the teaching profession.

Maryland’s public education system is ranked as the nation’s best for one simple reason: it does not stand still. Over the past three decades, Maryland has built a strong foundation, policy by policy, through two waves of reform to achieve national status as a leader in educational excellence. Today, Maryland is poised for its third wave of reform, and the State Board of Education’s mission couldn’t be clearer—**create a world-class system that prepares students for college and career success in the 21st century**. World-class means recognizing and acting on the new reality that a high school diploma is just the starting point; every student must be prepared to succeed in college or the workplace.

Maryland’s primary RTTT reforms will:

- Revise the preK-12 Maryland State Curriculum, assessments, and accountability system based on the Common Core State Standards to assure that all graduates are college and career ready. The State Board in June 2010 adopted the Common Core State Standards.
- Build a Maryland statewide technology infrastructure that links all data elements with analytic and instructional tools to monitor and promote student achievement.
- Redesign the model for preparation, development, retention, and evaluation of teachers and principals.
- Fully implement the innovative Maryland Breakthrough Center approach for transforming low-performing schools and districts.

Governor O’Malley also signed an Executive Order creating the Maryland Council for Educator Effectiveness. The Council—made up of teachers, principals, education experts, and elected officials—is in the process of developing a model evaluation system for educators required by the Education Reform Act of 2010.

## Common Core State Standards

The Maryland State Board of Education adopted the Common Core State Standards in English/language arts and mathematics for grades K-12. The Common Core State Standards initiative is a state-led effort coordinated by the National Governors Association and the Council of Chief State School Officers. Maryland became involved in the project when Governor Martin O’Malley and State Superintendent of Schools Nancy S. Grasmick signed on to the initiative along with representatives from 48 other states and two territories. Maryland is now in the process of revising its curriculum to align with the new document. Hundreds of classroom educators, instructional leaders, administrators, and higher education representatives are helping State officials review, refine, and align the current Maryland State Curriculum with the Common Core State Standards. The new Maryland Common Core State Curriculum is expected to be ready for State Board adoption in June 2011.

## Maryland School Assessments

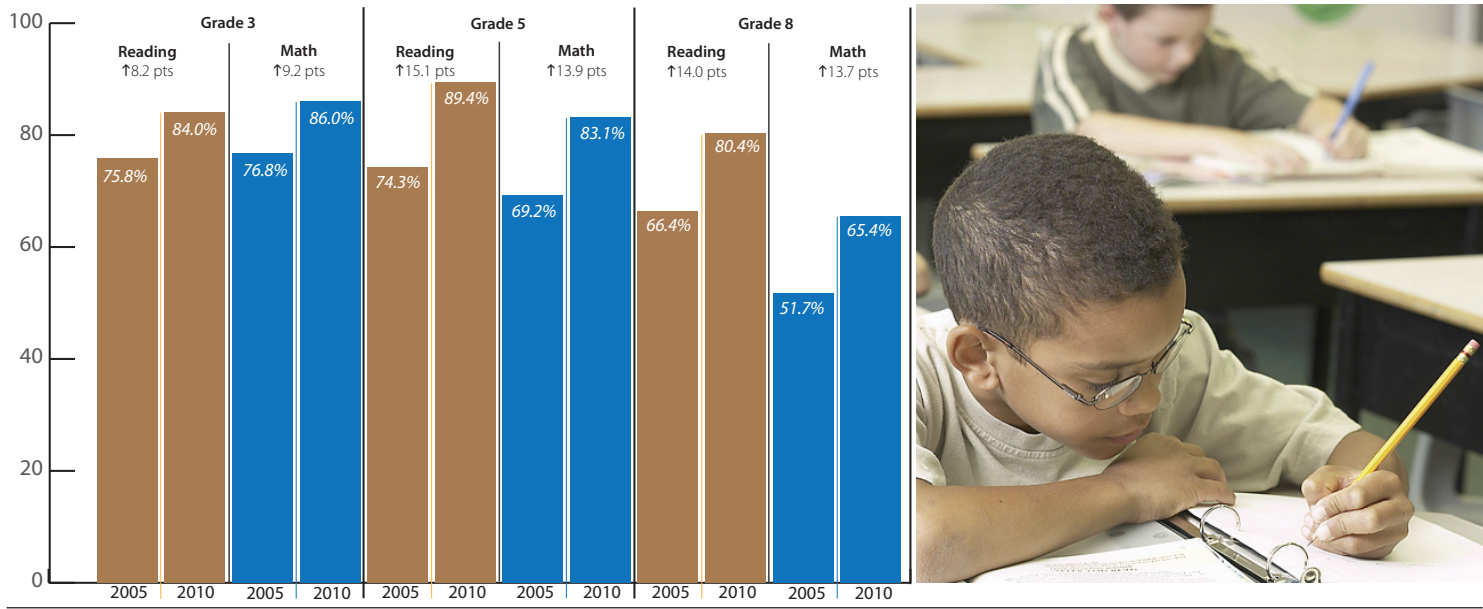
In 2010, Maryland experienced continued improvement on the **Maryland School Assessments** (MSAs). Overall improvement in mathematics was registered, and the percentage of students scoring in the “advanced” range for both mathematics and reading continued to rise. The percentage of elementary students scoring at the proficient levels in math increased from 84.9 percent in 2009 to 86.5 percent in 2010. At the middle school level, the percentage of math students scoring at the proficient levels improved from 71.2 percent in 2009 to 72.6 percent in 2010. The scores build on the progress made over the past seven years. Composite elementary reading scores have increased 25 points since 2003, while mathematics scores are up 26.5 points. Composite middle school reading scores are up 23 points since 2003, and mathematics has increased a remarkable 33 points.

The 2010 assessment score data in Maryland also show a continued closing of the achievement gaps that have plagued schools nationwide. Scores are expressed as the percentage of students in each system that scored at or above the proficiency levels set when the exams launched in 2003. For example:

- In elementary reading, the gap in achievement between students coming from circumstances of poverty (receiving free and/or reduced-price meals) and those that do not has been reduced by 19.1 points over the past seven years.
- In middle school reading, the gap in achievement between African American students and White students has decreased 17.2 points since 2003. The gap between Hispanic students and White students fell 15.7 points over the same period.
- The gap in elementary mathematics achievement fell 14.9 points between English Language Learners and native English speakers.

Seventy percent of Maryland schools met the federal improvement targets known as Adequate Yearly Progress (AYP). The number of Maryland schools in improvement rose slightly from 158 in 2009 to 175 this year. Of the 136 schools that did not make AYP for the first time in 2009, 119 made their AYP targets in 2010—88 percent. ([www.mdreportcard.org](http://www.mdreportcard.org))

Maryland Snapshot: Increase in MSA Scores 2005-2010



“Our State’s students continue to improve across-the-board, with some of the biggest gains coming from minority students often underrepresented on national tests,” said State Superintendent of Schools Nancy S. Grasmick. “Maryland’s students, teachers, administrators, and parents deserve another round of applause for this remarkable achievement. Big improvement can be found in schools throughout our State.”





Dr. Grasmick said, “By improving instruction and moving forward, we are preparing students for the next step in their education.”

**SAT and ACT Performance**

- Maryland students continue to rise above their peers across the nation on the SAT and ACT national assessments. Improving achievement by Maryland students is being tallied even as diversity among test-takers has reached an all-time high.
- Maryland’s composite SAT score jumped from 1497 in 2009 to 1502 in 2010, a 5-point increase on the 2400-point scale. That was the largest increase tallied by any state with more than 60 percent of its students taking the SAT.
- Scores in the mathematics portion of the SAT jumped 4-points, from 502 to 506; critical reading increased 1-point, from 500 to 501; and writing held steady at 495.
- Scores on the increasingly popular ACT exam also showed improvement and an increase in participation. The State’s 2010 graduates earned an average composite score of 22.3 on the college admission and placement exam, up from 22.1 last year. That’s well above the national average of 21.0, which actually fell over the previous year. The exam is scored on a scale of 1-36.
- As Maryland scores on the SAT composite rose by 5 points, the national composite was flat. The State has the 11<sup>th</sup> highest participation in the exam, with 7 in 10 seniors in the State taking the SAT.
- Public school student participation in the SAT grew by 4.7 percent in 2010, with increases in all ethnic groups. Meanwhile, the increase in participation on the ACT exam has been pronounced. The number of Maryland students taking the ACT exam increased 9.4 percent in 2010, and has jumped from 7,758 students in 2006 to 11,924 in 2010.



CTE provides students the opportunity to explore careers, apply academic concepts, and develop the technical skills needed in the 21st century workplace.

**Career Technology Education (CTE)**

The Maryland State Department of Education has recognized that success in 21<sup>st</sup> century careers requires that students develop strong academic and technical skills. Maryland’s Career and Technology Education (CTE) programs prepare students for further education and careers as part of their high school experience. There are 48 State-developed programs of study offered. All of these programs provide students the opportunity to explore careers, apply academic concepts, and develop technical skills needed in the 21<sup>st</sup> century workplace. These programs also provide students with the opportunity to earn early college credit and/or industry certification, which gives them a step ahead toward college and careers.

New statewide CTE programs have been developed to prepare more students for opportunities in Science, Technology, Engineering, and Mathematics (STEM) disciplines, while more traditional CTE programs, such as the Construction Professions and Auto Technology, have been revised to include advanced technical preparation with increased opportunity for high school students to earn early college credit and industry certifications. The fastest growing CTE programs include STEM-related fields such as, pre-engineering, biomedical sciences, IT networking, and interactive media.

In the fall of 2010, MSDE’s Division of Career and College Readiness received a \$1 million federal grant to fully implement the Automotive Technology Program of Study. The four-year grant was awarded through the U.S. Department of Education’s Promoting Rigorous Career and Technical Education Programs of Study project.

“Our schools and school systems have taken very seriously the challenge to help every child achieve.”  
—State Superintendent of Schools Nancy S. Grasmick



**Cultural Diversity**

Maryland’s competitive edge in an increasingly flat world depends on the preparation of internationally literate graduates—graduates who are culturally aware and proficient in languages other than English. One project in our Race to the Top grant establishes a world languages pipeline — beginning with articulated K-5 programs in Arabic, Chinese, Hindi, and dual immersion programs in Spanish.



**Diverse Enrollment**

The increasing diversity of Maryland’s classrooms is reflected in the dramatic growth of English Language Learners (ELLs) in the State. With a total of more than 170 home languages represented, the top five home languages of Maryland’s ELL population are Spanish, French, Chinese, Vietnamese, and Korean.

According to the 2010 Maryland Report Card enrollment data, White students make up 45.5 percent of the State’s enrollment, followed by African American students (37.9 percent); Hispanic (10.0 percent); Asian/Pacific Islander (6.1 percent); and American Indian/Alaskan Native (0.4 percent). As in the previous year, Hispanic and Asian/Pacific Islander student enrollment continues to rise steadily, while both White and African American student enrollment is slowly declining.

**Early Childhood Education**

In 2010, according to their teachers, 81 percent of entering kindergartners were fully ready for school—that’s a 3 percent increase over the previous year and a 32 percent increase since 2001-02. This statistically significant increase occurred for the composite score for Language and Literacy, Mathematical Thinking, and Scientific Thinking from 2001-02. In Language and Literacy the increase is 35-points, Mathematical Thinking has improved 35-points, and Scientific Thinking has jumped 44-points.

The Maryland State Department of Education expanded its State-recommended list of early childhood curricula for child care centers, Head Start programs, and nursery schools. The *Early Childhood Curriculum Project* is meant to offer resources for the classroom, which match up with the State’s pre-kindergarten and kindergarten curricular frameworks, also known as the State Curriculum. The project is designed to support preschool-age children before they start their school careers.

([www.MarylandPublicSchools.org/MSDE/divisions/child\\_care/early\\_learning](http://www.MarylandPublicSchools.org/MSDE/divisions/child_care/early_learning))

